

Remarks

Claims 1-5, 7-13, 15-19, and 21 stand rejected under 35 USC 102(b) as anticipated by Mutschler (U.S. patent 5,940,075). Dependent claims 6, 14 and 20 are allowable if rewritten to include all limitations of their parent claims.

Independent claims 1, 8 and 15 are amended to add the limitation of resolving overlapping screen regions. Claims 2-4, 11-12 and 16-21 are amended to conform them to the amended parent claims or to place them in better form. Claim 10 is canceled. No new matter is added by these amendments.

Applicants request reconsideration of the rejections in view of the amendments and the following arguments.

Applicants' attorney appreciates a telephone interview with Examiner Augustine that occurred on or about Nov. 2, 2009. The independent claims were discussed with regard to U.S. patent 5,940,075 (hereinafter Mutschler), which is the present basis for the rejection of pending claims. Attorney explained that Mutschler does not disclose, teach or suggest the detection of overlapping regions and the resolution of same during a process of converting legacy character-based terminal screen data into web-enabled GUI user interfaces screens. During the discussion, attorney explained why embodiments of the present invention resolve a conflict between the overlapping match regions and why the cited prior art does not. No resolution was reached. However, attorney was advised to submit new argument as to why the known prior art does not have the problem of detecting and resolving overlapping regions, as required by the claims.

The present invention as claimed is an innovative technique of converting legacy screen data into GUI screen data. The cited prior art attempts a conversion of character-based legacy screen data with a single process of sequentially examining the screen data. The cited prior art does not disclose the recognition and resolution of conflicts between overlapping screen regions. In fact, the prior art teaches away from designing a legacy screen with actual overlapping screen

regions. If overlapping screen regions were to actually exist in a legacy screen, the images or data for display in such regions would be distorted or overwritten and probably unusable. The inventions of present independent claims 1, 8, and 15 use a technique completely different from the prior art technique of converting legacy screens. A plurality of independent agents each examine an entire screen's worth of data looking for a host component type (a data pattern) anywhere in the screen data that is unique to each agent. The use of independent agents simplifies the problem of recognizing patterns in the data. For example, one agent might look for a menu of function keys anywhere in the screen data, while another agent might look for a simple text field for receiving user input. When an agent detects a pattern unique to the agent, the agent then calculates a region of the screen in which to place a corresponding GUI pattern. When the regions of all host component types (patterns) detected by all of the agents are combined at the end of detection, there is a possibility that some of the calculated regions overlap. This is usually a mathematical event occurring as a result of using independent agents to calculate pattern regions. When this occurs, the invention resolves such a conflict according to a set of priorities.

With regard to the claims, independent claim 1, for example, contains the following language:

code for scanning the character-based user interface by a
plurality of agents; code in each agent for determining the
existence of a different host component type unique to the agent;
code for defining a match region for each host component type
found to exist by an agent in the character-based user interface;
code for determining whether two or more match regions overlap
.... (Underlining added for emphasis)

The underlining in the above claim language highlights novel aspects of the claim that are summarized above and which distinguish over all known prior art, including Mutschler. Independent claims 8 and 15 contain similar limitations.

The Mutschler Patent

Mutschler discloses a single process that uses a Screen Control Language (SCL) and a legacy form to build a Host Reply Definition (HRD) file (see Figs. 5a-5c). An HRD file contains information that defines how to generate an HTML file corresponding to a legacy screen. An HRD file is defined at col. 5, line 62 as follows:

Host Reply Definition (HRD) shall mean a file used in the PowerClient 3GL environment that maps characters in the data stream from the host with the fields and their Data Names in the modernized Form.

Step 61 of Fig. 5b generates SCL text and an HDR file for a captured legacy form. There is no teaching in the specification relating to overlapping regions in either the legacy forms or in the corresponding browser forms.

Step 93 of Fig. 6c parses an HRD file and step 94 generates the corresponding HTML file that is sent to a browser at step 96. The following quotation is taken directly from col. 9 line 64 to col. 10, line 12 of the Mutschler patent:

Referring now to FIG. 6C at the connector H, the Web Agent parses the WDF or HRD file and associates Data Names from it with corresponding Data Values from the returned application Form data into Data Name/Data Value pairs (block 93). Next, the Web Agent generates an HTML page having an object reference to the SCL Web Control, whose parameters include:

- 1.) The SCL Text itself;*
- 2.) A list of the Data Name/Data Value pairs; and,*
- 3.) Other information necessary for the display of the SCL and interpretation of the Data Name/Data Value pairs (block 94).*

The Web Agent then returns the generated HTML page to the Web server (block 95). Following this, the Web server, which has been waiting for the response from the Web Agent, returns the HTML page to the Web browser (block 96).

Thus, it is clear that Mutschler uses a single process, rather than independent agents, to convert a legacy screen into a single file that in turn is used to generate a corresponding HTML file. The single process is in total control of screen placement. Thus, there is no possibility of generating overlapping regions. For that reason, Mutschler contains no mention

of recognizing and resolving overlapping regions of screen patterns as required by the independent claims.

The Dependent Claims

Since Mutschler does not teach the resolution of overlapping regions, dependent claims 3-7, 11-14 and 17-21, which relate to resolution of overlapping regions, further distinguish over Mutschler in their own right. Dependent claims 2, 9 and 16 are allowable at least because of their dependency.

Summary

All claims in prosecution are believed to distinguish over the art of record and are in condition for allowance. Examiner is respectfully requested to consider the claim amendments and present arguments and to pass this application to issue.

Respectfully Submitted,

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